Oral Questioning Technique for Developing Critical Thinking Skills in EFL Classroom

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Introduction:

Critical thinking, a rapidly growing concept in education has stimulated a flood of recent research and publications. Nowadays, critical thinking is one of the major concepts under consideration in education. It has been mostly used for first language education in the United States, but today, its role in second and foreign language learning and teaching is of great importance Moon asserts that critical thinking and its relationship to the educational process has become a central issue and it is time to explore the term. She adds since critical thinking is a process, which is involved in any research activity; it can be considered as a principal concept to education, especially at higher levels. In fact, it is a fundamental goal of learning (Taylor,2010).

A review of the pedagogical literature reveals that a growing number of studies focus on critical thinking, on what critical thinking skills can and should be taught, and on the most effective and appropriate framework for fostering it. Nevertheless, most educators and researchers agree that an important aspect of critical thinking is the ability to collect, evaluate and make use of information effectively and appropriately (Taylor,2010).As far as definitions for critical thinking are concerned, definitions that draw upon philosophy often stress the metacognitive element of critical thinking, arguing that it can be defined as “thinking about

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your thinking while you're thinking to make your thinking better" (Paul, 1993, p. 91). Similarly, Paul and Elder (1994) argue that critical thinking means that thinkers take charge of their own thinking. This also presupposes that people develop sound criteria and standards for analysing and evaluating their own thinking processes and use of these criteria to improve the quality of their thinking (Uden & Beaumont, 2006).

According to Santos and Fabricio (2006) the development of critical thinking presupposes an ongoing questioning of taken-for-granted assumptions, while according to Schumm and Post (1997), critical readers display the following characteristics: a) base their judgments on evidence, b) ask penetrating questions and evaluate ideas, c) distinguish between opinions and facts, and d) reflect on their ideas.

In the classroom, teacher's questioning is used most frequently as one of teaching techniques to initiate classroom talk (Game& Metcalfe,2009).). Critical thinking is about asking questions; it improves memory because we engage more closely with ideas. Although the ability to think critically has always been important, it is a vital necessity for the citizens of the current century.

Critical Thinking:

Critical thinking (CT) is an important skill, which should be applied to all aspects of learning (Mason& Washington, 1991). Students need to be able to think critically about the resources and information they use in their studies; they need to be critical when reading the work of others; their writing needs to show they have the ability to weigh up different arguments and perspectives and can express their own opinions based on sound judgements (Spratt,2005). Addtionally, Damer (2005,p.64) posited that critical thinking(CT) can be used to make value deductions against the information provided. As van Gelder (2005, p.1)

said that, “almost everyone agrees that one of the main goals of education, at whatever level, is to help students develop general thinking skills, especially critical thinking skills". In other word, critical thinking is a learned skill that requires practice and instruction (Watson, & Glaser, 2002).

CT has been recognized as essential in all levels of education for several years. In the same time, teaching CT in some ways remains a mystery (Chaisuriya, 2000; Nimkannon, 2007; Rfaner, 2006). However, Wallace (2003, p.70) declared, "One important factor to successful teaching of CT is the teachers' understanding of the concept of CT. Thus, it is necessary to conceptualize the concept of CT". Researchers have stressed the importance of CT skills for students (Kovalik,& Kovalik, 2007; Facione, 2011; Guiller, &Durndell, & Ross, 2008). Now CT enters into important decisions in students' daily life and affects their growth process in school and work. The term CT describes the deliberate thinking that helps students to decide on what to believe and how to act. It helps students examine a problem or issue from many angles to arrive at the best possible solution.

CT is known as the art of analyzing and evaluating thinking with the intent to improve it. In a world filled with conflicting and complex decisions, it is important that individuals develop intellectual skills that allow them to reason through tasks with meaningful thought. CT is the tool by which to do so. Through use of critical thinking skills, people can better understand the structures involved in systematic thinking which improve the quality of problem-solving in any subject or area of life (Lyutykh,2009). According to Santos and Fabricio (2006) the development of critical thinking presupposes an ongoing questioning of taken-for-granted assumptions, while according to Schumm and Post (1997), critical readers display the following

characteristics: a) base their judgments on evidence, b) ask penetrating questions and evaluate ideas, c) distinguish between opinions and facts, and d) reflect on their ideas.

Scriven and Paul (2003) defined critical thinking as an intellectually disciplined process in which students actively and skillfully conceptualize, apply, synthesize, and evaluate information generated by observation, experience, reflection, reasoning, and communication. Critical thinking does not expect students to answer the questions put in the class, but instead develops students' sound judgment for problem-solving, decision-making, and higher-order thinking (Taylor & Patterson, 2000). Facione (2000) believes that critical thinking is a cognitive process of developing reasonable, logical, and reflective judgment about what to believe or what to do. In the same line, Watson and Glaser (2002), the authors of Watson-Glaser Critical Thinking Appraisal, define critical thinking as a composite of attitudes, knowledge and skills. They point out that this composite includes: (1) attitudes of inquiry that involve an ability to recognize the existence of problems and an acceptance of the general need for evidence in support of what is asserted to be true; (2) knowledge of the nature of valid inferences, abstractions, and generalizations in which the weight or accuracy of different kinds of evidence are logically determined; and (3) skills in employing and applying the above attitudes and knowledge

Finally, Robert Ennis mentions 13 characteristics of thinkers with the ability to think in a critical manner. More specifically, he argues that they share the following features. According to Ennis (1989), they tend to:

a) be open-minded,
b) take a position (or change a position) when they are convinced by evidence,
c) take into account the entire situation, adopting a holistic approach,

d) seek precision and objectivity in information, making use of credible and reliable sources of information,
e) deal in an orderly manner with the elements of a complex whole,
f) search for options and alternative solutions,
g) look for reasons,
h) seek a clear statement of the issue,
i) keep the original problem in mind,
j) remain relevant to the point, and be sensitive to the feelings and knowledge level of others.

Benefits of Teaching Critical Thinking (CT) Skills in EFL Classrooms:

Many benefits can result from aiding students to become better thinkers and in making better decisions. Students can gain autonomy in forming their own conclusions through the process of listening to various possibilities of thought. Students can build a greater sense of curiosity and humility by looking closely at other people's insights and understanding their value (Rivas, 2011)Also, students will be able to develop respect for good reasoning by developing a framework to distinguish between the many influences they are exposed to. The first step for a successful critical thinker in English is to understand the differences in the way native English speakers use and manipulate language in order to convey their ideas. This means looking at how native speakers approach cohesiveness in their communication by looking at compare and contrast, giving opinions, narratives, cause and effect and many other functional parts of language that lead to successful communication with a native speaker (Brown & Keeley ,2010).

Unfortunately, it is very difficult to increase a student's CT skills with the lecture format. Topics are discussed sequentially rather than critically, and students tend to memorize the material since the lecture method facilitates

the delivery of large amounts of information. The student is placed in a passive rather than an active role since the teacher does the talking, the questioning, and, thus, most of the thinking (Maiorana, 1992).According to Winn (2004, p.6), few teachers are using tools that build a student's mental state for CT skills. Teachers do an excellent job transmitting academic content but fail to teach students how to think effectively about subject matter. By increasing the amount of CT skills used in the classroom, students are more likely to perform higher on standardized tests (Beyer, 2008); and in the future, students could have a better chance of being prepared for the real world .

Critical Thinking (CT) Skills and Sub Skills

For Thomson (2002, p.65) "CT is the ability to analyze facts, generate and organize ideas, defined opinions, make comparisons, draw inferences, evaluate arguments and solve problems". In addtion, Paul & Binker (1990,p.185) have developed a list of dimensions of critical thought as follows:

A. Affective Strategies:

1- thinking independently.
2-developing insight into egocentricity or sociocentricity.
3- exercising fair-mindedness.
4- exploring thoughts underlying feelings and feelings underlying thoughts.

B. Cognitive Strategies--Macro-Abilities:

1. refining generalizations and avoiding oversimplifications.
2. comparing analogous situations: transferring insights to new contexts.
3. developing one's perspective: creating or exploring beliefs, arguments, or theories.

C. Cognitive Strategies--Micro-Skills:

1. comparing and contrasting ideals with actual practice
2. thinking precisely about thinking: using critical vocabulary

3. noting significant similarities and differences

Oral Questioning:

Oral questioning is an effective way to stimulate student motivation and participation. Questioning provides for involvement of all students. In addition, it focuses student attention and develops interest and curiosity. The effective use of oral questioning techniques provides students with opportunities to practice self-expression. At the same time, it allows variety to be added to the lesson. Logically sequenced questions can stimulate logical and critical thinking and serve as a guide to reasoning (Ralph, 1998). Also, using questions directed at different levels of knowledge can lead students into the different levels of thinking. An important outcome of using questions is that the special abilities and interests of individual students can be discovered. Students often acquire special knowledge and skills through hobbies, work experience, or family activities. You can use these special abilities and interests as an additional class resource to promote learning (Chuska, 1995). Ralph (1998) expressed oral questioning techniques can be used for a variety of purposes, including the following:

- To introduce, summarize, or review a lesson To clarify points previously made To bring up points omitted To bring reading assignments into focus To help students form new insights To promote students' understanding To develop students' attitudes and values
- To teach students to use ideas rather than to simply memorize them

Oral questioning can provide important evaluation information. Students' preparation for the lesson can be tested (e.g., through questioning, you can determine if they read and understood an assignment). Questions during the

lesson introduction can serve as a pretest of students' knowledge level. Also, using questions during the lesson can provide immediate feedback on how well students are progressing. Incorporating questions in the lesson summary and review can provide at least a partial evaluation of the extent to which students have achieved the instructional objectives (Stone, 1993).

Importance of Oral Questioning:

The construction of good oral questions requires three considerations level of instruction, use for interrogative, and clarity of meaning. English being a language, there is needed to emphasize oral questioning because this enhances mastery of the language by students based on the principal that practice makes perfect. Despite the fact that there is no doubt that questions are crucial in the performance of both teachers and learners, this will depend on their types and functions in addition to skill and care in their use. The technique of questioning has become even more vital for the teacher. When considered in the context of grammar, this concept should be manifested not through mere memorization, recall and items of structure, but through involvement of the students in active participation and the provision of opportunities for the student to listen, to manipulate syntactical elements and use language naturally to communicate real meanings in circumstances which approximate real life situations (Kamii & DeVries, 1978; Kamii & Warrington, 1999; Schwartz, 1996; Stone, 1993).

Currently, there has been a wide interest in teachers' questioning in English as foreign language classrooms. Many previous studies have focused more on the influence of teachers' questioning on classroom interaction or learners' oral output; however, few research studies have examined the relationship between teachers' questioning and students' critical thinking in Egyptian context

Purposes of Questioning:

In the classroom, questions are used for a number of purposes. By understanding, the range of purposes teachers can expand their use of questioning in instruction. Among other purposes, Kissock and Iyortsuun (1984, p. 6) state that questions can be used to:

1. Develop processes of thinking and guide inquiry and decision-making.
2. Acquire and clarify information, answer concerns, and develop skills.
3. Determine knowledge students bring to class so lessons can be made to meet their needs.
4. Provide motivation by encouraging active participation in learning.
5. Lead students to consider new ideas and make use of ideas already learned.

Types of Oral Questioning:

Open questions:

are useful in getting learners to speak. can provide the tutor with a good deal of information. often begin with the words: What, Why, When, Who can be statements: "tell me about", "give me examples of".

Closed questions:

These are questions that require a yes or no answer and are useful for checking facts. They should be used with care - too many closed questions can cause frustration and shut down conversation.

Specific questions:

These are used to determine facts. For example "How much did you spend on that".

Probing questions:

These check for more detail or clarification. Probing questions allow the tutor to explore specific areas. However care should be taken because they can easily make people feel they are being interrogated.

Hypothetical questions:

These pose a theoretical situation in the future. For example, "What would you do if…?' These can be used to get learners to think of new situations. They are also be used in interviews to find out how people might cope with new situations.

Definition of Terms:

1- Critical Thinking Skills:

1. According to Scriven (1996,p.7) critical thinking referred to "The intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action."
2. The present research adapted this definition of critical thinking, which is "an ability to present, evaluate, and interpret data, to develop lines of argument and make sound judgements".

2-Oral Questioning:

1. Ole Takona (1996) defined oral questioning as "an arouse student interest in the subject matter of the lesson".
2. The present research adapted this definition of Oral Questioning "Test students' knowledge of what the lesson has covered, and check the effectiveness of the instruction".

Statement of the Problem:

In Egypt, most students of secondary stage suffered from weakness of critical thinking skill in English. Thus, this a suggested research based of oral questioning

technique, as a method of developing critical thinking skills for first secondary stage students.

Consequently, the present research attempted to ensure the following questions;

- To what extend the oral questioning technique influence on critical thinking skills?

Purpose of the Study

The main aim of the present study is to develop critical thinking skills through oral questioning technique.

Hypotheses of the Research

The present research tries to verify the following hypotheses

- There is statistically significant difference between the mean scores of the experimental group students and the mean scores of the control group students who were taught via traditional methods on the post administration of the critical thinking skills in favor of the experimental group.

Delimitations of the Research:

Some delimitations of the research were imposed by the nature of the problem .They are as follows:

1- The researcher used a group of 60 first year secondary school students (30 for control group & 30 for the experimental group) of El Zahra secondary school for girls in Hellwan.

2-Critical thinking skills are (explanation- analyses- interpretation).

Method:

Participants:

The participant of the research was sixty students selected from El Zahraa Secondary School for Girls in

Hellwan in the school year 2012-2013. (thirty students for the control group and thirty students for the experimental group).

Instruments:

The present research aims to develop critical thinking skills by using oral questioning in the light of authentic assessment. Therefore, the researcher used the following main instruments:

(1) Critical thinking skills checklist to determine the critical thinking sub-skills necessary for first secondary student.

(2) A pre –posttest to measure the level of students' critical thinking skills.

(3) A rating scale rubric for scoring critical thinking skills test.

Content of the Checklist:

1. Explanation

- Expressing about the logical connections between ideas.
- Identifying the relationship between the heading and the content.

2. Inference

- Drawing alternatives of meaning.
- Predicting upcoming events.

3. Analysis

- Establishing cause-and-effect relationships in what he/she writes
- Identifying the problems expressed in the text, and finds different solutions for the problems

4. Interpretation

- Clarifying the meaning
- Identifying authors' point of view

5. Evaluation

-Expressing his/her feelings, thoughts and opinions verbally and in writing.

-Passing Judgments.

6. Self-Regulation

-Self-Correction of the mistakes.

-Self Reflection

Procedures

1-The researcher reviewed the pervious studies that dealt with critical thinking skills, oral questioning.

2-Selecting the suitable techniques of oral questioning (brainstorming- mind mapping questioning –student centered discussion…etc) which has an effect on critical thinking skills inside the classroom

3-Identifying appropriate topics of reading from student textbook for first secondary school, Hello6!. These topics are (The Kangaroo-Wonders of The Modern World- Who needs Satellites?-Phobia- the Hound of the Bakervills)

4-The control group and the experimental group were administrered.

Results:

t-test for independent samples was used to compare the mean scores of the two groups in the posttest. The t- test paired sample results proved to be statistically consistent with hypothesis. See table (8)

Table ()

Test results of the post administration of the critical thinking test comparing the control and experimental groups mean scores in critical thinking skill.

Groups	N	M	S.D	D.F	't'. value	Level of sig.
EXP. Group	30	31.93	6.977	58	7.311	sig. at 0.01
CON. Group	30	21.00	4.291	58		

The previous table showed that the mean score of the experimental group students (31.93) to be higher than the mean score of the control group students (21.00) on the post administration of the critical thinking skill test. Therefore, students' progress in critical thinking skill in general due to

the use of the oral questioning activities as a teaching method.

That prove the verify of the first hypothesis. Moreover, the above table showed that the estimated t. value (7.311) is statistically significant at (0.01). Thus, it can be safely said that there is statistically significant difference between the experimental and control group in the post critical thinking test in the favor of the experimental group, it indicates the effectiveness of oral questioning in developing critical thinking skills, so the first hypothesis is accepted.

The previous table indicated that the experimental students' mean scores of each critical thinking skill were increased as follows (6.07-6.27-3.07-6.67-6.53-3.33). These results implied that the higher means are for the post administration of the experimental group in critical thinking test. The t-test results about the difference between the mean scores of experimental group students and control group on the favour of the experimental group. This difference was significant for all skills except (interpretation and self-regulation) it may be due to the lake of activities in the application or it may reveals to the shortage of students' attention to the activities in the application But in general these two skills are still bigger that those of control group. Moreover, effect size of critical thinking skills it calculated by using Eta square.

To conclude, the experimental group outperformed the control group in improving students critical thinking skills, this result could be due to the use of oral questioning in teaching critical thinking skills, so oral questioning proved to be better than the via traditional method in teaching critical thinking skills. It means that oral questioning are an effect method, which helps students to acquire the critical thinking skills in secondary stage.

It is worth mentioning that, the previous results of the study are in line with those of The findings were also

confirmed by the findings of other studies (Dillon, 1987; Gall, 1970; White & Lightbown,1984; Wragg, 1984). as they all stated that the oral questioning are an effective method in developing critical thinking skills.

Discussion:

In light of the questions and hypothesis of the present research, the results are presented and discussed in this section. The data presented in table 1 shows the number of oral questions asked by the participants of the present study and answers the first question, "To what extend the oral questioning technique influence on critical thinking skills" When holding a comparison between the experimental and the control group students' mean scores on the post administration of the critical thinking skills test the estimated value of 't' (31.93) was highly significant at the (0.00) level of significance. Thus the experimental group students, that used the oral questioning, outperformed the control group students on the post administration of the critical thinking test in spite of their being of the same level on the pre- administration of critical thinking test.

The data analysis has revealed that that the oral questioning activities proved to be effective in developing students' (the experimental group) critical thinking skills. This was clear in verifying the two main hypotheses of the research. The effect size of the oral questioning in developing the critical thinking skill of 1st secondary school students (experimental group) was 0.787, It was large. This results proved the positive effectiveness of the oral questioning as an active learning method for developing critical thinking skill and sub skills such as the studies of (confirmed by Orlich *et al*. (1985) and Kissock and Iyortsuun (1984). Ondiek (1974).

Conclusion and Recommendation:

On the basis of the discussion above, the following conclusions can be drawn:

1- oral questioning encourages the use of critical thinking because it involves analyzing and problem solving; therefore, The oral questioning is a cognitive learning method.

2- oral questioning teaches many lessons; some of the most important lessons it teaches are lessons that are needed in society; i.e., competition, cooperation .

3- oral questioning allows for the interaction between classmates, and peers; it also allows for exchanging knowledge among students.

4- oral questioning enhance students' oral and written expression language in English language.

5- oral questioning enhance students reading comprehension of first secondary school students.

6- teacher is also able to see the various capabilities of students at the same time allowing introverted students to speak out. It helps to break down "cliques"

7-Participation in oral questioning allows students to make decisions, and through the feedback students receive, students see the results of their actions, and can therefore learn how to adjust his words and actions to produce results that are more likeable.

8-oral questioning encourages students centered learning, which make students more active and participate effectively and that made them gain the target.

These results support the results of other studies done before; such (Dillon, 1987; Gall, 1970; White & Lightbown,1984; Wragg, 1984). it assured that oral questioning is an effective method for developing critical thinking skills.

In light of the present research significant results, the following recommendations are made:

- there is need to organise frequent seminars, workshops and in-service courses for teachers. The purpose of such activities should, among others, specifically focus on enlightening, refreshing and sharpening teachers' knowledge and skills of questioning in relation to current developments in theory and practice.
- design EFL secondary school course with regard to the importance of critical thinking skills and should supply the course with more activities to develop this skill.
- give the balance of implantation of critical thinking skills in the four language skills of English equally in the schoolbook.
- give more practice to develop critical thinking skill in the class book such as the oral questioning because it proved the effect for developing critical thinking skills of secondary school students.

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